

**Flood Control Project Maintenance
Levee Inspections**

Fall 2019 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

| ST0009 | Overall LMA Rating | Total LMA Miles | * Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A. | | | | | | |
|--|------------------------|------------------|---|-------------|-------------|---------|------------------------------|---------|--|
| Sutter Maintenance Yard Tisdale Bypass | M * | 8.94 | | | | | | | |
| Rated Item | Maintenance Deficiency | | | | Enforcement | | Design & System Obsolescence | | |
| | M Miles | U Miles | M + 4U Miles | Threshold % | M Miles | U Miles | M Miles | U Miles | |
| Earthen Levee | | | | | | | | | |
| Vegetation | 0.18 | | 0.18 | 2.01% | | | | | |
| Encroachments | 0.01 | | 0.01 | 0.11% | 0.15 | | | | |
| Animal Control | 0.01 | 0.01 | 0.05 | 0.56% | | | | | |
| Erosion / Bank Caving | 0.06 | | 0.06 | 0.67% | | | | | |
| Supplemental | | | | | | | | | |
| DRAFT DWR UCIP Field Study | | | | | 0.04 | 0.01 | | | |
| LMA Totals: | 0.26 | 0.01 | 0.30 | 3.36% * | 0.19 | 0.01 | 0.00 | 0.00 | |
| Unit No. 01 Tisdale Bypass LB | Overall Unit Rating | Total Unit Miles | * Overall Unit Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall Unit Rating is M instead of A. | | | | | | |
| ST0009 | M * | 4.51 | | | | | | | |
| Rated Item | Maintenance Deficiency | | | | Enforcement | | Design & System Obsolescence | | |
| | M Miles | U Miles | M + 4U Miles | Threshold % | M Miles | U Miles | M Miles | U Miles | |
| Earthen Levee | | | | | | | | | |
| Vegetation | 0.18 | | 0.18 | 3.99% | | | | | |
| Animal Control | 0.01 | 0.01 | 0.05 | 1.11% | | | | | |
| Erosion / Bank Caving | 0.02 | | 0.02 | 0.44% | | | | | |
| Supplemental | | | | | | | | | |
| DRAFT DWR UCIP Field Study | | | | | 0.03 | | | | |
| Unit Totals: | 0.21 | 0.01 | 0.25 | 5.54% * | 0.03 | 0.00 | 0.00 | 0.00 | |
| Unit No. 02 Tisdale Bypass RB | Overall Unit Rating | Total Unit Miles | | | | | | | |
| ST0009 | A | 4.43 | | | | | | | |
| Rated Item | Maintenance Deficiency | | | | Enforcement | | Design & System Obsolescence | | |
| | M Miles | U Miles | M + 4U Miles | Threshold % | M Miles | U Miles | M Miles | U Miles | |
| Earthen Levee | | | | | | | | | |
| Encroachments | 0.01 | | 0.01 | 0.23% | 0.15 | | | | |
| Erosion / Bank Caving | 0.04 | | 0.04 | 0.90% | | | | | |
| Supplemental | | | | | | | | | |
| DRAFT DWR UCIP Field Study | | | | | 0.01 | 0.01 | | | |
| Unit Totals: | 0.05 | 0.00 | 0.05 | 1.13% | 0.16 | 0.01 | 0.00 | 0.00 | |

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Fall 2019 Levee Inspection Results****Sutter Maintenance Yard Tisdale Bypass**

| | Spring (March - May) | Summer ** (June - August) | Fall (September - November) | Winter ** (December - February) |
|----------------------------------|-------------------------|------------------------------|--------------------------------|------------------------------------|
| † Overall LMA Rating (Fall Only) | | | M * | |

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

* Overall LMA Threshold Percent is less than
10.00%; however, U Rated Miles are present,
so the Overall LMA Rating is M instead of A.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Sutter Maintenance Yard Tisdale Bypass

| Waterway | | | Bank | Unit Miles |
|--|-------------------------|---------------------------|--------------------------------|---------------------------------|
| Unit No. 01 Tisdale Bypass | | | Left | 4.51 |
| | Spring (March - May) | Summer (June - August) | (September - November) Fall | Winter (December - February) |
| Unit Maintenance Rating (Fall Only) | | | M * | |
| Date of Inspection | 5/9/2019 - 5/9/2019 | | 9/25/2019 - 9/25/2019 | |
| DWR Inspector | Makar Sokol | | Makar Sokol | |
| Accompanied By | Wade Wylie DWR DFM | | | |

* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- completion of the inspection
- any changes other than the results of normal maintenance
- corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|----------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|----------------------------------|----------------------------------|--------------|----|------------------------|-----|
| LM Start | | Rating ** | A | Issue No. | 2 |
| LM End | | Issue Type + | Ma | Location * | N/A |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Operations & Maintenance Manuals | | | ° | ° |
| DWR ID | DWR_ST0009_01_s_2013_2 | | | | |
| Comment Code | | | | | |
| | | | | | |
| Inspector Comment | | | | | |
| Sutter Yard has the O&M manuals. | | | | | |

No Photos

| | | | | | |
|--|--------------------------------|--------------|----|------------------------|-----|
| LM Start | | Rating ** | A | Issue No. | 4 |
| LM End | | Issue Type + | Ma | Location * | N/A |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Emergency Supplies & Equipment | | | ° | ° |
| DWR ID | DWR_ST0009_01_s_2013_4 | | | | |
| Comment Code | | | | | |
| | | | | | |
| Inspector Comment | | | | | |
| Sutter Yard has a stockpile of emergency supplies and equipment. | | | | | |

No Photos

| | | | | | |
|--|-------------------------------|--------------|----|------------------------|-----|
| LM Start | | Rating ** | A | Issue No. | 5 |
| LM End | | Issue Type + | Ma | Location * | N/A |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Flood Preparedness & Training | | | ° | ° |
| DWR ID | DWR_ST0009_01_s_2013_5 | | | | |
| Comment Code | | | | | |
| | | | | | |
| Inspector Comment | | | | | |
| Sutter Yard had flood fight training October 2018. | | | | | |

No Photos

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|----------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 0.77 | Rating ** | C | Issue No. | 10 |
| LM End | 0.77 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Encroachments | | | 39.028328 ° | 39.028328 ° |
| | | | | -121.807756 ° | -121.807756 ° |
| DWR ID | DWR_ST0009_01_s_2019_10 | | | | |
| Comment Code | | | | | |
| TR : Tree or limb | | | | | |
| Inspector Comment | | | | | |
| The large tree should be removed from the waterside slope. | | | | | |

No Photos

| | | | | | |
|--|---------------------------|--------------|----|------------------------|---------------|
| LM Start | 1.78 | Rating ** | C | Issue No. | 11 |
| LM End | 1.78 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Encroachments | | | 39.028180 ° | 39.028180 ° |
| | | | | -121.789002 ° | -121.789002 ° |
| DWR ID | DWR_ST0009_01_s _ 2019_11 | | | | |
| Comment Code | | | | | |
| TR : Tree or limb | | | | | |
| Inspector Comment | | | | | |
| The tree should be removed from the waterside slope. | | | | | |

No Photos

| | | | | | |
|-------------------------------------|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 2.07 | Rating ** | M | Issue No. | 13 |
| LM End | 2.07 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.028165 ° | 39.028165 ° |
| | | | | -121.783568 ° | -121.783568 ° |
| DWR ID | DWR_ST0009_01_f_2019_13 | | | | |
| Comment Code | | | | | |
| E1 : Note and monitor erosion site. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_286_13_20190926_00020.jpg



View of the erosion along the waterside slope. Fall 2019.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|----------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|------------------------|--------------|----|------------------------|---------------|
| LM Start | 2.07 | Rating ** | M | Issue No. | 9 |
| LM End | 2.07 | Issue Type + | Ma | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.028165 ° | 39.028165 ° |
| | | | | -121.783567 ° | -121.783567 ° |
| DWR ID | DWR_ST0009_01_f_2019_9 | | | | |
| Comment Code | | | | | |
| E2 : Schedule repair of erosion site prior to the next inspection. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_286_9_20190926_00021.jpg



View of the erosion along the landside slope. Fall 2019.

| | | | | | | |
|---|-----------------------------------|--------------|-----|------------------------|---------------|--|
| LM Start | 2.14 | Rating ** | A/W | Issue No. | 25 | |
| LM End | 2.14 | Issue Type + | Ma | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | End | |
| Item | DRAFT DWR UCIP LMA Responsibility | | | 39.028132 ° | 39.028132 ° | |
| | | | | -121.782389 ° | -121.782389 ° | |
| DWR ID | 16591 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:16591 FS_ID:51484 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)10/11/2016 Crossing appears to be in good conditon.(DWR Sutter Yard - a Freitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 1 of 2: 4-foot by 7-foot reinforced concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:05 AM | | | | | | |

Photo 1 of 3 : UCIP_FA_2019_51484_64226.jpg



Slide gates on WS shoulder.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

Sutter Maintenance Yard Tisdale Bypass

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|-----------------------------------|--------------|-----|------------------------|---------------|
| LM Start | 2.14 | Rating ** | A/W | Issue No. | 26 |
| LM End | 2.14 | Issue Type + | Ma | Location * | |
| Category | Supplemental | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | DRAFT DWR UCIP LMA Responsibility | | | 39.028124 ° | 39.028124 ° |
| | | | | -121.782344 ° | -121.782344 ° |
| DWR ID | 16856 | | | | |
| Comment Code | | | | | |
| | | | | | |
| Inspector Comment | | | | | |
| DS_ID:16856 FS_ID:51485 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)10/11/2016 Crossing appears to be in good condition.(DWR Sutter Yard - a Freitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 4-foot by 7-foot concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM | | | | | |

| | | | | | |
|----------|-------------|--------------|-----|------------|------------------|
| LM Start | 2.14 | Rating ** | A/W | Issue No. | 26 (cont) |
| LM End | 2.14 | Issue Type + | Ma | Location * | |

Photo 1 of 3 : UCIP_FA_2019_51485_64230.jpg



Slide gates on WS shoulder.

Photo 2 of 3 : UCIP_FA_2019_51485_64229.jpg



Wooden flap gates on WS toe.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|----------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|--|-----------------------------------|--------------|-----|------------------------|---------------|--|
| LM Start | 2.14 | Rating ** | A/W | Issue No. | 26 (cont) | |
| LM End | 2.14 | Issue Type + | Ma | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | End | |
| Item | DRAFT DWR UCIP LMA Responsibility | | | 39.028124 ° | 39.028124 ° | |
| | | | | -121.782344 ° | -121.782344 ° | |
| DWR ID | 16856 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:16856 FS_ID:51485 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 4-foot by 7-foot concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM | | | | | | |

Photo 3 of 3 : UCIP_FA_2019_51485_64228.jpg



Pump house on LS toe.

| | | | | | |
|---|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 2.16 | Rating ** | M | Issue No. | 12 |
| LM End | 2.16 | Issue Type + | Ma | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Animal Control | | | 39.028137 ° | 39.028137 ° |
| | | | | -121.782020 ° | -121.782020 ° |
| DWR ID | DWR_ST0009_01_f_2016_12 | | | | |
| Comment Code | | | | | |
| A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 2 : FA_2019_ST0009_286_12_20190822_00002.jpg



View of a rodent hole along the levee crown.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|---|-------------------------|--------------|----|------------------------|--------------|--|
| LM Start | 2.16 | Rating ** | M | Issue No. | 12 (cont) | |
| LM End | 2.16 | Issue Type + | Ma | Location * | LS | |
| Category | Earthen Levee | | | GPS Latitude/Longitude | | |
| | | | | Start | End | |
| Item | Animal Control | | | 39.028137° | 39.028137° | |
| | | | | -121.782020° | -121.782020° | |
| DWR ID | DWR_ST0009_01_f_2016_12 | | | | | |
| Comment Code | | | | | | |
| A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. | | | | | | |
| Inspector Comment | | | | | | |
| | | | | | | |

Photo 2 of 2 : FA_2019_ST0009_286_12_20190822_00003.jpg



Another view of the rodent holes along the crown and landside slope.

| | | | | | |
|--|---------------------------------------|--------------|----|------------------------|--------------|
| LM Start | 2.19 | Rating ** | C | Issue No. | 15 |
| LM End | 2.19 | Issue Type + | Ma | Location * | CR |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Crown Surface / Depressions / Rutting | | | 39.028129° | 39.028129° |
| | | | | -121.781399° | -121.781399° |
| DWR ID | DWR_ST0009_01_s_2019_15 | | | | |
| Comment Code | | | | | |
| C3 : Add appropriate gravel or road base. Grade and compact. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

No Photos

| | | | | | |
|---|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 2.23 | Rating ** | U | Issue No. | 14 |
| LM End | 2.23 | Issue Type + | Ma | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Animal Control | | | 39.028145 ° | 39.028145 ° |
| | | | | -121.780669 ° | -121.780669 ° |
| DWR ID | DWR_ST0009_01_f_2019_14 | | | | |
| Comment Code | | | | | |
| A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_286_14_20190926_00022.jpg



View of large animal burrows on the landside slope. Fall 2019.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|----------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start | 2.37 | Rating ** | C | Issue No. | 16 |
| LM End | 2.44 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | GPS Latitude/Longitude | | |
| | | | Start | End | |
| Item | Encroachments | | 39.028102° | 39.028087° | |
| | | | -121.778063° | -121.776709° | |
| DWR ID | DWR_ST0009_01_s_2019_16 | | | | |
| Comment Code | | | | | |
| DE : Debris | | | | | |
| Inspector Comment | | | | | |
| The floating debris washed up along the waterside toe. Debris should be removed. | | | | | |

No Photos

| | | | | | |
|-------------------|-------------------------|--------------|------------------------|--------------|-----------|
| LM Start | 2.56 | Rating ** | C | Issue No. | 17 |
| LM End | 2.56 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | GPS Latitude/Longitude | | |
| | | | Start | End | |
| Item | Encroachments | | 39.028068° | 39.028068° | |
| | | | -121.774615° | -121.774615° | |
| DWR ID | DWR_ST0009_01_f_2019_17 | | | | |
| Comment Code | | | | | |
| TR : Tree or limb | | | | | |
| Inspector Comment | | | | | |

No Photos

| | | | | | |
|--|---------------------------------------|--------------|------------------------|--------------|-----------|
| LM Start | 2.62 | Rating ** | C | Issue No. | 18 |
| LM End | 2.62 | Issue Type + | Ma | Location * | CR |
| Category | Earthen Levee | | GPS Latitude/Longitude | | |
| | | | Start | End | |
| Item | Crown Surface / Depressions / Rutting | | 39.028025° | 39.028025° | |
| | | | -121.773475° | -121.773475° | |
| DWR ID | DWR_ST0009_01_s_2019_18 | | | | |
| Comment Code | | | | | |
| C3 : Add appropriate gravel or road base. Grade and compact. | | | | | |
| Inspector Comment | | | | | |

No Photos

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|---|----------------------------|--------------|----|------------------------|---------------|--|
| LM Start | 3.65 | Rating ** | M | Issue No. | 27 | |
| LM End | 3.65 | Issue Type + | En | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | End | |
| Item | DRAFT DWR UCIP Field Study | | | 39.027911 ° | 39.027911 ° | |
| | | | | -121.754224 ° | -121.754224 ° | |
| DWR ID | 16590 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:16590 FS_ID:51486 EP_NO: 14740 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/10/2017 Carsonite marker on WS missing. (DWR Sutter Yard- AFreitag)10/11/2016 Carsontie marker on WS shoulder is still missing.(DWR Sutter Yard - afreitag)4/18/2016 Carsonite marker on WS shoulder is missing.5/7/2015 Marker on WS shoulder missing.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Carsonite marker on WS shoulder missing and should be replaced. FIELD_STRUCT_DESC: 4-inch steel gas pipeline through the levee and under channel, 2.5 feet below the crown. Carsonite signs on both the landside (LS) and the waterside (WS) shoulders. Gas wells 200 feet off of the LS toe. (Permit No. 14740, 1988 - Nahama and Weagant Energy Co.) [Additional Reference(s): DWR Levee Log, 1993]. FS Date: 4/12/2017 9:21:13 AM | | | | | | |

| | | | | | |
|----------|------|--------------|----|------------|-----------|
| LM Start | 3.65 | Rating ** | M | Issue No. | 27 (cont) |
| LM End | 3.65 | Issue Type + | En | Location * | |

Photo 1 of 2 : UCIP_FA_2019_51486_76941.jpg



Close up of LS marker

Photo 2 of 2 : UCIP_FA_2019_51486_64220.jpg



Carsonite sign on LS shoulder with view of gas well in background.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 4.27 | Rating ** | M | Issue No. | 19 |
| LM End | 4.45 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Vegetation | | | 39.029548 ° | 39.032104 ° |
| | | | | -121.743568 ° | -121.743065 ° |
| DWR ID | DWR_ST0009_01_f_2019_19 | | | | |
| Comment Code | | | | | |
| V1 : Control annual grass and weeds on the levee slopes and easements. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_286_19_20190926_00023.jpg



View of the vegetation along the waterside slope. Fall 2019.

| | | | | | |
|---|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 4.35 | Rating ** | C | Issue No. | 24 |
| LM End | 4.35 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Encroachments | | | 39.030637 ° | 39.030637 ° |
| | | | | -121.743023 ° | -121.743023 ° |
| DWR ID | DWR_ST0009_01_s_2017_24 | | | | |
| Comment Code | | | | | |
| DE : Debris | | | | | |
| Inspector Comment | | | | | |
| Remove the debris from the waterside slope and toe. | | | | | |

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|---|----------------------------|--------------|----|------------------------|---------------|
| LM Start | 4.50 | Rating ** | M | Issue No. | 28 |
| LM End | 4.50 | Issue Type + | En | Location * | |
| Category | Supplemental | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | DRAFT DWR UCIP Field Study | | | 39.032801 ° | 39.032801 ° |
| | | | | -121.743360 ° | -121.743360 ° |
| DWR ID | 16855 | | | | |
| Comment Code | | | | | |
| | | | | | |
| Inspector Comment | | | | | |
| DS_ID:16855 FS_ID:51487 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/10/2017 LS marker still broken and there is no marker on the WS. (DWR Sutter Yard- AFreitag)10/11/2016 LS carsonite marker is still broken.(DWR Sutter Yard - afreitag)4/18/2016 Carsonite marker on LS slope is broke off.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 1 of 2: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Line goes across the Sutter Bypass and through both levees. Carsonite sign on the landside (LS) slope. Drawings are available. (Permit No. 14455, 1986 - Depco Inc.). [Additional Reference(s): DWR Levee Log, 1993]. FS Date: 4/12/2017 9:22:54 AM | | | | | |

| | | | | | |
|----------|-------------|--------------|----|------------|------------------|
| LM Start | 4.50 | Rating ** | M | Issue No. | 28 (cont) |
| LM End | 4.50 | Issue Type + | En | Location * | |

Photo 1 of 3 : UCIP_FA_2019_51487_64235.jpg



Carsonite sign on LS slope.

Photo 2 of 3 : UCIP_FA_2019_51487_64234.jpg



Carsonite sign on LS slope.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|--|----------------------------|--------------|----|------------------------|---------------|--|
| LM Start | 4.50 | Rating ** | M | Issue No. | 28 (cont) | |
| LM End | 4.50 | Issue Type + | En | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | End | |
| Item | DRAFT DWR UCIP Field Study | | | 39.032801 ° | 39.032801 ° | |
| | | | | -121.743360 ° | -121.743360 ° | |
| DWR ID | 16855 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:16855 FS_ID:51487 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/10/2017 LS marker still broken and there is no marker on the WS. (DWR Sutter Yard- AFreitag)10/11/2016 LS carsonite marker is still broken.(DWR Sutter Yard - afreitag)4/18/2016 Carsonite marker on LS slope is broke off.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 1 of 2: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Line goes across the Sutter Bypass and through both levees. Carsonite sign on the landside (LS) slope. Drawings are available. (Permit No. 14455, 1986 - Depco Inc.). [Additional Reference(s): DWR Levee Log, 1993]. FS Date: 4/12/2017 9:22:54 AM | | | | | | |

Photo 3 of 3 : UCIP_FA_2019_51487_76942.jpg



Close up of LS marker

| | | |
|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|--|----------------------------|--------------|----|------------------------|---------------|-----|
| LM Start | 4.50 | Rating ** | M | Issue No. | 29 | |
| LM End | 4.50 | Issue Type + | En | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | | End |
| Item | DRAFT DWR UCIP Field Study | | | 39.032801 ° | 39.032801 ° | |
| | | | | -121.743360 ° | -121.743360 ° | |
| DWR ID | 16589 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:16589 FS_ID:51488 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/10/2017 LS marker still broken and there is no marker on the WS. (DWR Sutter Yard- AFreitag)10/11/2016 Carsonite marker on the LS is still broken.(DWR Sutter Yard - afreitag)4/18/2016 Carsonite marker on LS slope is broken off.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Line goes across the Sutter Bypass and through both levees. Carsonite sign located on the landside (LS) slope. (Permit No. 14455, 1986 - Depco Inc.). [Additional Reference(s): DWR Levee Log, 1993]. FS Date: 4/12/2017 9:24:35 AM | | | | | | |

| | | | | | |
|----------|-------------|--------------|----|------------|------------------|
| LM Start | 4.50 | Rating ** | M | Issue No. | 29 (cont) |
| LM End | 4.50 | Issue Type + | En | Location * | |

Photo 1 of 3 : UCIP_FA_2019_51488_64233.jpg



Carsonite sign on LS slope.

Photo 2 of 3 : UCIP_FA_2019_51488_64232.jpg



Carsonite sign on LS slope.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|------|------------|--------------------------|-------------|
| Unit No. 01 Tisdale Bypass | Left | 4.51 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|--|----------------------------|--------------|----|------------------------|-----------|---------------|
| LM Start | 4.50 | Rating ** | M | Issue No. | 29 (cont) | |
| LM End | 4.50 | Issue Type + | En | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | | End |
| Item | DRAFT DWR UCIP Field Study | | | 39.032801 ° | | 39.032801 ° |
| | | | | -121.743360 ° | | -121.743360 ° |
| DWR ID | 16589 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:16589 FS_ID:51488 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 4/10/2017 LS marker still broken and there is no marker on the WS. (DWR Sutter Yard- AFreitag)10/11/2016 Carsonite marker on the LS is still broken.(DWR Sutter Yard - afreitag)4/18/2016 Carsonite marker on LS slope is broken off.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Line goes across the Sutter Bypass and through both levees. Carsonite sign located on the landside (LS) slope. (Permit No. 14455, 1986 - Depco Inc.). [Additional Reference(s): DWR Levee Log, 1993]. FS Date: 4/12/2017 9:24:35 AM | | | | | | |

Photo 3 of 3 : UCIP_FA_2019_51488_76943.jpg



Close up of LS marker

| | | |
|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Sutter Maintenance Yard Tisdale Bypass

| Waterway | | | Bank | Unit Miles |
|--|-------------------------|---------------------------|--------------------------------|---------------------------------|
| Unit No. 02 Tisdale Bypass | | | Right | 4.43 |
| | Spring (March - May) | Summer (June - August) | (September - November) Fall | Winter (December - February) |
| Unit Maintenance Rating (Fall Only) | | | A | |
| Date of Inspection | 5/9/2019 - 5/9/2019 | | 9/25/2019 - 9/25/2019 | |
| DWR Inspector | Makar Sokol | | Makar Sokol | |
| Accompanied By | Wade Wylie DWR DFM | | | |

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|-------------------|------------------------|--------------|----|------------------------|---------------|
| LM Start | 0.11 | Rating ** | M | Issue No. | 1 |
| LM End | 0.26 | Issue Type + | En | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Encroachments | | | 39.023760 ° | 39.024559 ° |
| | | | | -121.818875 ° | -121.816344 ° |
| DWR ID | DWR_ST0009_02_s_2012_1 | | | | |
| Comment Code | | | | | |
| DT : Ditch | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_1_20190822_00001.jpg



View of the agricultural ditch along the landside toe.

| | | | | | |
|--|------------------------|--------------|----|------------------------|---------------|
| LM Start | 0.69 | Rating ** | M | Issue No. | 9 |
| LM End | 0.71 | Issue Type + | Ma | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.025602 ° | 39.025657 ° |
| | | | | -121.808527 ° | -121.808027 ° |
| DWR ID | DWR_ST0009_02_s_2017_9 | | | | |
| Comment Code | | | | | |
| E2 : Schedule repair of erosion site prior to the next inspection. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_9_20190822_00006.jpg



View of the erosion along the landside toe from the County Road.

| | | | | | |
|--|------------------------|--------------|----|------------------------|---------------|
| LM Start | 0.92 | Rating ** | C | Issue No. | 7 |
| LM End | 0.92 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Encroachments | | | 39.025536 ° | 39.025536 ° |
| | | | | -121.804139 ° | -121.804139 ° |
| DWR ID | DWR_ST0009_02_s_2019_7 | | | | |
| Comment Code | | | | | |
| TR : Tree or limb | | | | | |
| Inspector Comment | | | | | |
| The large tree should be removed from the waterside slope. | | | | | |

No Photos

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|--------------------------|--------------|----|------------------------|---------------|
| LM Start | 0.97 | Rating ** | M | Issue No. | 10 |
| LM End | 0.98 | Issue Type + | Ma | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.025540 ° | 39.025572 ° |
| | | | | -121.803272 ° | -121.802990 ° |
| DWR ID | DWR_ST0009_02_s_ 2017_10 | | | | |
| Comment Code | | | | | |
| E2 : Schedule repair of erosion site prior to the next inspection. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_10_20190822_00007.jpg



View of the erosion along the landside toe from the County Road.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|---|----------------------------|--------------|----|------------------------|---------------|
| LM Start | 1.14 | Rating ** | U | Issue No. | 291 |
| LM End | 1.14 | Issue Type + | En | Location * | |
| Category | Supplemental | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | DRAFT DWR UCIP Field Study | | | 39.025503 ° | 39.025503 ° |
| | | | | -121.800053 ° | -121.800053 ° |
| DWR ID | 16594 | | | | |
| Comment Code | | | | | |
| | | | | | |
| Inspector Comment | | | | | |
| DS_ID:16594 FS_ID:53047 EP_NO: 267 Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/4/2018 Erosion around WS vault is progressing. Recommended FSRP evaluation of this site. Dense vegetation around the site. Crossing remains "Urgent" due to the erosion observed on WS. (O.Yakimov - DWR UCIP)4/10/2017 Erosion appears to be getting worse at the WS vault. It is starting to erode away the WS toe road. (DWR Sutter Yard- AFreitag)10/11/2016 Erosion still present behind the WS vault.(DWR Sutter Yard - afreitag)4/18/2016 Erosion happening around the WS concrete vault.5/7/2015 Burrowing near WS toe stil present.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.10/17/2012 Burrowing along downstream side of concrete vault on WS Toe. May need to be grouted. FIELD_STRUCT_DESC: 54-inch reinforced concrete irrigation pipe through the levee, 29.5 feet below the crown. Slide gates on both the waterside (WS) and the landside (LS) ends. WS end gate in 5-foot by 6-foot concrete box. LS end gate in concrete ""U"" shaped headwall. Concrete encased steel siphon pipe under and across bypass. (Permit Nos. 267 and 290 - Sutter Basin Improvement Co. [dates unknown]). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, August 1955 (Station 61+25)]. FS Date: 10/4/2018 1:10:58 PM | | | | | |

| | | | | | |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | 1.14 | Rating ** | U | Issue No. | 291 (cont) |
| LM End | 1.14 | Issue Type + | En | Location * | |

Photo 1 of 3 : UCIP_FA_2019_53047_64675.jpg



Slide gate at concrete outlet on LS toe.

Photo 2 of 3 : UCIP_FA_2019_53047_64674.jpg



Slide gate at concrete outlet on LS toe.

| | | | | | |
|-----------------|----------------------|--------------------------|---|-----------------------------------|--|
| * Location | | ** Rating | | + Issue Type | |
| LS : Land Side | N/A : Not Applicable | A : Acceptable | N : Not Inspected/Rated | Ma : Maintenance Deficiency | |
| WS : Water Side | | M : Minimally Acceptable | C : Corrected | Ob : Design & System Obsolescence | |
| CR : Crown | | U : Unacceptable | A/W : Acceptable but Monitor & Maintain | En : Enforcement | |

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|----------|----------------------------|--------------|----|------------------------|---------------|
| LM Start | 1.14 | Rating ** | U | Issue No. | 291 (cont) |
| LM End | 1.14 | Issue Type + | En | Location * | |
| Category | Supplemental | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | DRAFT DWR UCIP Field Study | | | 39.025503 ° | 39.025503 ° |
| | | | | -121.800053 ° | -121.800053 ° |
| DWR ID | 16594 | | | | |

Comment Code

Inspector Comment

DS_ID:16594
FS_ID:53047
EP_NO: 267
Repair Type: Urgent
Crossing Status: Found
UCIP Comments: 10/4/2018 Erosion around WS vault is progressing. Recommended FSRP evaluation of this site. Dense vegetation around the site. Crossing remains "Urgent" due to the erosion observed on WS. (O.Yakimov - DWR UCIP)4/10/2017 Erosion appears to be getting worse at the WS vault. It is starting to erode away the WS toe road. (DWR Sutter Yard- AFreitag)10/11/2016 Erosion still present behind the WS vault.(DWR Sutter Yard - afreitag)4/18/2016 Erosion happening around the WS concrete vault.5/7/2015 Burrowing near WS toe stil present.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.10/17/2012 Burrowing along downstream side of concrete vault on WS Toe. May need to be grouted.
FIELD_STRUCT_DESC: 54-inch reinforced concrete irrigation pipe through the levee, 29.5 feet below the crown. Slide gates on both the waterside (WS) and the landside (LS) ends. WS end gate in 5-foot by 6-foot concrete box. LS end gate in concrete "U" shaped headwall. Concrete encased steel siphon pipe under and across bypass. (Permit Nos. 267 and 290 - Sutter Basin Improvement Co. [dates unknown]). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, August 1955 (Station 61+25)].
FS Date: 10/4/2018 1:10:58 PM

Photo 3 of 3 : UCIP_FA_2019_53047_64673.jpg



Concrete box, vent, and 54-inch steel pipe in WS toe.

| * Location | ** Rating | + Issue Type |
|---|---|--|
| LS : Land Side WS : Water Side CR : Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
| N/A : Not Applicable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | |

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 1.14 | Rating ** | M | Issue No. | 13 |
| LM End | 1.14 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.025460 ° | 39.025460 ° |
| | | | | -121.800022 ° | -121.800022 ° |
| DWR ID | DWR_ST0009_02_f_2016_13 | | | | |
| Comment Code | | | | | |
| E2 : Schedule repair of erosion site prior to the next inspection. | | | | | |
| Inspector Comment | | | | | |
| Erosion around the WS concrete vault. | | | | | |

Photo 1 of 2 : FA_2019_ST0009_287_13_20190822_00009.jpg



View of the erosion along the concrete vault.

| | | | | | |
|----------|-------------|--------------|----|------------|------------------|
| LM Start | 1.14 | Rating ** | M | Issue No. | 13 (cont) |
| LM End | 1.14 | Issue Type + | Ma | Location * | WS |

Photo 2 of 2 : FA_2019_ST0009_287_13_20190822_00010.jpg



Another view of the erosion along the concrete vault.

| | | | | | |
|--|--------------------------|--------------|-----|------------------------|---------------|
| LM Start | 1.19 | Rating ** | A/W | Issue No. | 290 |
| LM End | 1.19 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.025490 ° | 39.025490 ° |
| | | | | -121.799240 ° | -121.799240 ° |
| DWR ID | DWR_ST0009_02_s_2015_290 | | | | |
| Comment Code | | | | | |
| E1 : Note and monitor erosion site. | | | | | |
| Inspector Comment | | | | | |
| Sutter Yard needs to monitor the erosion along the berm. | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_290_20190822_00012.jpg



View of the erosion along the waterside berm.

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|--|------------------------|--------------|-----|------------------------|---------------|
| LM Start | 1.29 | Rating ** | A/W | Issue No. | 4 |
| LM End | 1.29 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.025478 ° | 39.025478 ° |
| | | | | -121.797232 ° | -121.797232 ° |
| DWR ID | DWR_ST0009_02_s_2013_4 | | | | |
| Comment Code | | | | | |
| E2 : Schedule repair of erosion site prior to the next inspection. | | | | | |
| Inspector Comment | | | | | |
| Sutter Yard needs to monitor the erosion. | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_4_20190822_00003.jpg



View of the erosion along the waterside berm.

| | | | | | |
|--|------------------------|--------------|-----|------------------------|---------------|
| LM Start | 1.48 | Rating ** | A/W | Issue No. | 5 |
| LM End | 1.50 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.025460 ° | 39.025446 ° |
| | | | | -121.793815 ° | -121.793347 ° |
| DWR ID | DWR_ST0009_02_s_2013_5 | | | | |
| Comment Code | | | | | |
| E2 : Schedule repair of erosion site prior to the next inspection. | | | | | |
| Inspector Comment | | | | | |
| Sutter Yard needs to monitor the erosion. | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_5_20190822_00004.jpg



View of the erosion along the waterside berm.

| | | | | | |
|--------------------------------|------------------------|--------------|----|------------------------|---------------|
| LM Start | 2.41 | Rating ** | C | Issue No. | 8 |
| LM End | 2.41 | Issue Type + | Ma | Location * | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Slope Stability | | | 39.025292 ° | 39.025292 ° |
| | | | | -121.776467 ° | -121.776467 ° |
| DWR ID | DWR_ST0009_02_s_2019_8 | | | | |
| Comment Code | | | | | |
| S1 : Repair slope instability. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

No Photos

| | | | |
|--|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

Sutter Maintenance Yard Tisdale Bypass

No Photos

View of the erosion along the waterside berm.

View of good vegetation control on the waterside slope. Fall 2019.

Page 7 of 10

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|-------------------------------------|---------------------------|--------------|-----|------------------------|---------------|
| LM Start | 4.09 | Rating ** | A/W | Issue No. | 18 |
| LM End | 4.09 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Erosion / Bank Caving | | | 39.024912 ° | 39.024912 ° |
| | | | | -121.745237 ° | -121.745237 ° |
| DWR ID | DWR_ST0009_02_f _ 2017_18 | | | | |
| Comment Code | | | | | |
| E1 : Note and monitor erosion site. | | | | | |
| Inspector Comment | | | | | |
| | | | | | |

Photo 1 of 1 : FA_2019_ST0009_287_18_20190822_00011.jpg



View of the erosion along the waterside berm.

| | | | | | |
|--|-------------------------|--------------|----|------------------------|---------------|
| LM Start | 4.17 | Rating ** | C | Issue No. | 12 |
| LM End | 4.17 | Issue Type + | Ma | Location * | WS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | Encroachments | | | 39.024408 ° | 39.024408 ° |
| | | | | -121.743920 ° | -121.743920 ° |
| DWR ID | DWR_ST0009_02_s_2019_12 | | | | |
| Comment Code | | | | | |
| TR : Tree or limb | | | | | |
| Inspector Comment | | | | | |
| The large tree should be removed from the waterside slope and toe. | | | | | |

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | |
|----------|----------------------------|--------------|----|------------------------|---------------|
| LM Start | 4.20 | Rating ** | M | Issue No. | 292 |
| LM End | 4.20 | Issue Type + | En | Location * | |
| Category | Supplemental | | | GPS Latitude/Longitude | |
| | | | | Start | End |
| Item | DRAFT DWR UCIP Field Study | | | 39.024079 ° | 39.024079 ° |
| | | | | -121.743420 ° | -121.743420 ° |
| DWR ID | 23099 | | | | |

Comment Code

Inspector Comment

DS_ID:23099
FS_ID:51491
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 4/10/2017 Crossing appears to be in good condition.
(DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition but there is no permit on file. Photos of the markers were uploaded on 5/20/2013.(DWR Sutter Yard - afreitag)5/3/2016 Need photos of markers on both WS and LS. 4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.10/17/2012 Need to identify permit for crossing.
FIELD_STRUCT_DESC: Steel natural gas pipeline of an unknown size through the levee, at an unknown depth. Markers visible on the landside (LS) shoulder and toe and the waterside (WS) shoulder and toe. No permit has been identified since the crossing was field discovered in 2012.
FS Date: 4/12/2017 9:30:05 AM

| | | | | | |
|----------|-------------|--------------|----|------------|-------------------|
| LM Start | 4.20 | Rating ** | M | Issue No. | 292 (cont) |
| LM End | 4.20 | Issue Type + | En | Location * | |

Photo 1 of 3 : UCIP_FA_2019_51491_64681.jpg



Marker on LS shoulder and toe

Photo 2 of 3 : UCIP_FA_2019_51491_64680.jpg



Marker on WS shoulder

| | | | |
|--|--|--|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|--|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sutter Maintenance Yard Tisdale Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|----------------------------|-------|------------|--------------------------|-------------|
| Unit No. 02 Tisdale Bypass | Right | 4.43 | 09/25/2019 09/25/2019 | Makar Sokol |

| | | | | | | |
|---|----------------------------|--------------|----|------------------------|---------------|--|
| LM Start | 4.20 | Rating ** | M | Issue No. | 292 (cont) | |
| LM End | 4.20 | Issue Type + | En | Location * | | |
| Category | Supplemental | | | GPS Latitude/Longitude | | |
| | | | | Start | End | |
| Item | DRAFT DWR UCIP Field Study | | | 39.024079 ° | 39.024079 ° | |
| | | | | -121.743420 ° | -121.743420 ° | |
| DWR ID | 23099 | | | | | |
| Comment Code | | | | | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| DS_ID:23099 FS_ID:51491 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition but there is no permit on file. Photos of the markers were uploaded on 5/20/2013.(DWR Sutter Yard - afreitag)5/3/2016 Need photos of markers on both WS and LS. 4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.10/17/2012 Need to identify permit for crossing. FIELD_STRUCT_DESC: Steel natural gas pipeline of an unknown size through the levee, at an unknown depth. Markers visible on the landside (LS) shoulder and toe and the waterside (WS) shoulder and toe. No permit has been identified since the crossing was field discovered in 2012. FS Date: 4/12/2017 9:30:05 AM | | | | | | |

Photo 3 of 3 : UCIP_FA_2019_51491_64679.jpg



Marker on WS toe

| | | |
|--|---|---|
| * Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|